

# AUTOMATIC TANK GAUGING

*...a lesson in LEAK DETECTION*

## What is it?

- 3 Automatic Tank Gauging Systems (ATGSs) use automated processes to monitor product level and inventory control of UST systems.

## Will you be in compliance?

- 3 When installed and operated according to the manufacturer's instructions, ATGSs meet the federal leak detection requirements for new and existing UST systems.
- 3 A test performed each month in accordance with third party certification fulfills the requirements for the life of the tank.

## Will it work at your site?

- 3 ATGSs have been used primarily on tanks containing gasoline or diesel with a capacity of up to 15,000 gallons.
- 3 If considering ATGSs for larger tanks or other products, discuss its applicability with an ADEQ certified service provider.

## Regulatory requirements?

- 3 An ATGS must be able to detect a leak of at least 0.2 gallon per hour (gph) with a probability of detection of 95% and a probability of false alarm of 5%.
- 3 Older ATGSs unable to detect a leak of at least 0.2 gph with a probability of detection of 95% and a probability of false alarm of 5% must be combined with monthly inventory control.

## Things to consider

- 3 Each tank must be equipped with a separate ATGS probe that is permanently installed through an opening on the top of the tank.
- 3 The ATGS probe is connected to a monitor displaying product level information and monthly test results. ADEQ recommends multiple monthly tests be performed.
- 3 ATGSs can be programmed and monitored with off-site computers.
- 3 For **non-continuous ATGSs**, product should not be delivered or withdrawn from the tank before or during the monthly test for the time period specified in the third party protocol.

## How do Automatic Tank Gauging Systems Work ?

### FEATURES OF AN ATGS INCLUDE:

- 4 The ATGS measures the product level and temperature in a tank.
- 4 In the **inventory mode**, the ATGS can be used in place of the gauge stick to measure product level and perform inventory control.
- 4 In the **test mode**, the tank is taken out of service and the product level and temperature are measured and analyzed. Some systems, known as **continuous ATGSs**, do not require the tank to be taken out of service to perform a test. These systems can gather and analyze product level and temperature during many short periods when no product is being added to or taken from the tank.
- 4 Some ATGSs can be programmed and retrofitted to satisfy the overfill requirement. Please see the document titled Spill and Overfill Prevention.
- 4 If the monthly report from the monitoring device reads **fail**, then report a SUSPECTED RELEASE within 24 hours to the LUST Hotline @ 602-207-4303. However, if you have reason to believe the monitoring device is defective then immediately repair, recalibrate or replace the defective equipment and perform an additional test that reads **pass**, then no SUSPECTED RELEASE report is needed.

### Maintenance

- 4 All monitors and alarms should be periodically calibrated and maintained according to the manufacturer's instructions to ensure that they are functioning properly.

### Required Documentation

- 4 Show the ATGS was installed and repaired by a technician certified by the manufacturer.
- 4 Save all ATGS maintenance records for the operational life of the system.
- 4 Show the ATGS ran a valid 0.2 gph leak test a minimum of once a month.
- 4 Printouts of monthly test results must be kept for at least 12 months.

In the event of any discrepancy between this document and the Arizona Revised Statutes or Rules, the statutes or rules shall prevail.